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# Citrus Culture

Second Edition



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## DESCRIPTION OF CITRUS TREES BEST ADAPTED TO THE GULF COAST.

### SATSUMA.

This is a medium to small orange of the true kid-glove type practically seedless, one of the most hardy of the edible oranges. Quality medium to extra choice when grown on sandy pine land, also, on red yellow sandy clay pine lands. Color, orange yellow. Very prolific even when very young. Annual bearer if properly cared for. Plantings of Satsuma trees have proven extremely profitable along the Gulf Coast of Mississippi, Alabama and Florida. Probably the best latitude for growing the Satsuma to perfection is between the 30th and 31st degree north latitude, season October, November and December, and with care can be kept for home use through January and February, if picked and carefully wrapped in paper as soon as ripe. Origin, Japan, where it lives to be several hundred years of age, and it is reasonable to expect will be long lived in this country also.

### POMELO (GRAPEFRUIT).

DUNCAN: One of the hardiest of this family. Heavy bearer, bearing mostly in clusters. Quality very good. Probably planted more than any other variety for market as well as home use. Tree of spreading habit.

WEBB: Origin, Jackson County, Mississippi. Thrifty grower. Not quite as bitter as Duncan. Does not bear quite as young as Duncan, nor in such large clusters. The tree is more upright in growth.

### LEMON.

KENNEDY: Origin, Texas. Very rank grower and early bearer. Considered the hardiest of commercial lemons. Fairly hardy while dormant; but as the sap rises very early it is likely to freeze in this section in some seasons. Quality good.

### KUMQUAT.

Up-right grower; oblong fruit; very sweet rind and very sour juice. Highly ornamental. Early bearer and very prolific. Excellent for marmalade and preserves.

## CULTURE OF CITRUS FRUITS.

### SELECTION OF SOIL.

Land must be naturally or artificially well-drained preferably sandy clay loam. Heavy, rich alluvial soil will not



produce as choice thin skinned oranges of high flavor as the sandy soil, which is especially congenial to the hardy citrus trifoliata stock.

The round sweet oranges, commonly called Creole Sweets, may be grown on the heavier alluvial soils when propagated on other than the Citrus Trifoliata root.

Preparation of land should be thorough and very deep. Culture frequent and very shallow.

### **FERTILIZING.**

Young trees may be well-fertilized with thoroughly rotten stable, barn-yard or poultry manure, and cow peas or velvet beans may also be grown in the orchard for the first year or two after planting. If this yard manure is not obtainable, use a brand of "Orchard Grower" analysing about ten per cent Phosphoric Acid, four per cent Ammonia and two per cent Potash, putting about two pounds to the tree on poor land, thoroughly worked in around the trees near end of roots, not close about stem of tree. On ordinary land one pound is sufficient at planting time, and increase at the rate of from one to one and a half pounds per year. Remember, the roots of an established tree usually extend twice as far as the branches.

When bearing period arrives use commercial fertilizer low in Nitrogen and strong in Phosphoric Acid and Potash. We are using a "Fruit Producer" analysing ten per cent Phosphoric Acid, two per cent Ammonia, ten per cent Potash with good success for bearing trees. Well-rotted cow manure may be used with very little danger from scab. Fresh manure from the horse stable is very much inclined to produce scab.

### **WINTER PROTECTION**

The best known safeguard to save citrus trees in case of very extreme cold weather is to bank or mound up about six inches above the place of budding with clean earth. Orchard heaters may be used to good advantage in case of a moderate freeze, especially after the sap is up and trees have started. This is seldom needed on the Mississippi and Alabama Gulf Coast.

### **TIME AND METHOD OF PLANTING.**

There are two conditions that should be avoided if possible in planting citrus trees, viz: cold or dry. By cutting back the soft new growth they may be transplanted at any time in the summer when sufficiently moist. Perhaps the

best time to plant, it might be said, is from the first of March to the middle of June for Spring, and September first to December thirtieth for Fall planting.

Make holes plenty large enough to spread roots out well to natural position, being sure to prune off all bruised and broken roots. Use well pulverized surface soil among the roots, packed in good and solid. If land needs fertilizing incorporate thoroughly with the soil among the roots a shovel full of WELL-ROTTED compost of barn-yard manure, or about two pounds of fine ground bone meal. If neither of these is available use the 10-4-2 Orchard Grower mentioned above, but do not allow it to come in direct contact with the roots, but scatter around over the roots after they are well covered with mellow surface soil, covering this in turn with two or three inches of soil. One pound per tree will be sufficient of this grade at planting time. Plant same depth trees stood in nursery on dry ground, on moist soil about one inch higher, and cover the surface roots about three inches deep. Many trees are ruined by too deep planting.

#### **SIZE OF TREES TO PLANT.**

The larger sizes, five-eighths to three-fourths inch caliper, usually give the best satisfaction in growth and early bearing, although splendid orchards are grown from the smaller sizes with proper care and a little additional time.

#### **DISTANCE.**

From 15 to 25 feet is the usual variation for the Satsuma, according to methods of cultivation in use, though one of the most profitable small orchards in Southern Mississippi is planted 12 1-2 feet each way. The greater distance is necessary if cultivation is to be done with a double team. The Satsuma tree will spread from 10 to 15 feet with 10 to 15 years of good care, and possibly more on some soils. Just how large they will grow in this country is not yet known, as they have only been grown here for a limited time. In large orchards, it is well to leave a space for a driveway at certain regular intervals for convenience in gathering fruit.

#### **INSECT PESTS, ETC.**

The insect enemies of the citrus fruits are not many, but those few that do infest the trees need very persistent fighting by spraying to keep them in check. The Orange Dog is a worm with a head resembling a puppy's head. When these are numerous use a spray of Arsenate of lead, 1 pound

to 12 gallons of water. If only a few are present, they may be hand picked. For the White Fly and other scale insects use a reliable brand of scale destroyer. There are several now on the market.

All spraying material can be used with safety stronger in the winter than in the summer or growing season. Therefore, it is important that this be THOROUGHLY done during the dormant period and followed by regular summer spraying in infected districts, the best time being about a week or ten days after each brood of White Fly disappears. Where there are no near infections, two sprayings usually suffice to keep clean—one in winter and one in summer.

In some seasons, especially the wet ones, fungus diseases may give more or less trouble. Scab, which is the cause of rough, warty fruit and distorted leaves, is probably the most common and should be controlled by spraying with Bordeaux once thoroughly while trees are dormant, again soon after the blossoms have fallen, and probably about twice more at intervals of three weeks apart, and should the season be especially conducive to this trouble continue at similar intervals, giving two more sprayings.

The rust mite causing the fruit to have a rusty appearance is easily controlled by any good sulphur solution spray. Spray about three times, June 1st, July 1st and again during August; or equal parts of sulphur and lime dusted on twice each month is also effective.

Citrus canker is a comparatively newly recognized disease of the citrus family which was probably introduced into this country from Japan. It is recognized by the cankerous-looking spots on the leaves, wood and fruit which gradually destroy the entire tree. Though quite widely distributed it is hoped—now that the federal government is assisting the State authorities—its complete eradication will be accomplished. As yet no efficient remedy seems to have been discovered, and the destruction by burning of all trees affected is advised. It is a fortunate circumstance for the Satsuma industry that this disease is rarely found on the Satsuma and Kumquat trees. Citrus Trifoliata, Grapefruit and various varieties of the round oranges seem to be the most susceptible. No doubt a remedy will be found in time as the scientists get better acquainted with the disease.

### AVERAGE YIELD

When Satsuma trees of 1-2 or 5-8 inch caliper are planted and cared for as herein described, the following yield may



be expected though larger yields have been produced:

2 years after planting, 10 to 15 fruits.

3 years after planting, 30 to 60 fruits.

4 years after planting, 100 to 150 fruits.

5 years after planting, 200 to 300 fruits.

Increasing at this ratio for a number of years with good care.

Grapefruits may be expected to yield about an equal amount of fruit though a little more subject to damage from freezing, as the sap rises more quickly than in the Satsuma, in case of unreasonably warm days in winter.

### **PRICES, GRADING, PACKING, ETC.**

We advise shipping only choice thin-skinned Satsumas, graded into three sizes or more, neatly wrapped and packed in a box, just 1-2 the size of a Florida orange box, called a half strap. Frequently two of these are banded together and called a "strap." While prices will naturally vary the same as all fruit does, such fruit has been bringing around \$1.50 to \$2.00 per 1-2 strap, and we believe will always bring very lucrative prices.

Use a neat but plain label with name and address.

### **A FEW DON'TS.**

Don't select a wet soil.

Don't fail to select good trees.

Don't fail to cultivate.

Don't fail to spray when necessary.

Don't mix fruit of different sizes and quality in one box.

Don't remove fruit from tree except with clippers.

Don't fail to put your name and address on box.

